

Application IP/X.25 IP/X.25 Relay **GTP SNDCP** SNDCP **GTP** UDP/TCP LLC UDP/TCP LLC Relay BSSGP BSSGP IΡ **RLC** IΡ RLC L2 **NW Service** L2 MÃĈ NW Service MAC L1 L1 Radio IF\* Radio IF\* L1bis L1bis **GGSN** SGSN **BSS** MS Gi Ġb Gn Um

\*WCDMA in 3G

Fig. 3

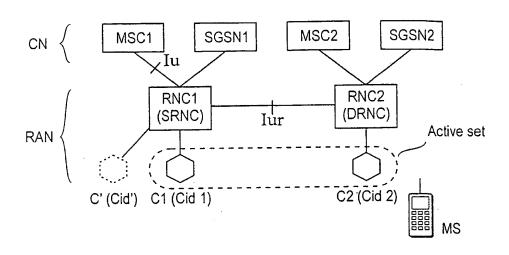


Fig. 4 CN **RAN** SGSN2 SGSN1 **GGSN** MSC/VLR HLR RNC1 MS RNC2 4-1: RA\_Upd\_Req 4-2. Cell\_ID added 4-3: PDP\_Ctxt\_Req 4-4. PDP\_Ctxt\_Resp 4-5: Forward Pkts 4-6: Security functions 4-7: Upd\_PDP\_Ctxt\_Req 4-8: Upd\_PDP\_Ctxt\_Resp 4-9: Upd\_Location 4-10: Cahcel\_Loc 4-11: Cancel\_Loc\_Ack 4-12: Ins\_Subscr\_Data 4-13: Ins\_Subscr\_Data\_Ack 4-14: Upd\_Loc\_Ack 4-15: Loc\_Upd\_Req 4-16: Loc\_Upd\_Acc 4-17: RA\_Upd\_Acc 4-18: RA\_Upd\_Complete

CN **RAN** HLR SGSN1 **GGSN** MS RNC2 RNC1 SGSN2 5-1: RA\_Upd\_Req 5-2. Cell\_ID added 5-3: Security functions 5-4: Fwd\_RAU\_Req 5-5: Upd\_Location 5-6: Ins\_Subscr\_Data 5-7: Ins\_Subscr\_Data\_Ack 5-8: Establish lu links and MS Context in RNC2 5-9: Fwd\_RAU\_Acc 5-10: RA\_Upd\_Acc 5-11: Suspend DL transfer for acknowledged mode 5-12: RA\_Upd\_Complete 5-13: Start radio connection with RNC2. 5-14: Fwd\_RAU\_Complete 5-15: Cancel lu links and MS Context in RNC1. Forward packets to RNC2. 5-16: Resume DL transfer 5-17: Upd\_PDP\_Ctxt\_Req 5-18: Upd\_PDP\_Ctxt\_Resp 5-19: Cancel\_Loc 5-20: Cancel\_Loc\_Ack